AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-2. (Canceled)

3. (Previously presented) A biocompatible poly-β-1→4-N-acetylglucosamine comprising up to about 150,000 N-acetylglucosamine monosaccharides covalently attached in a β-1→4 conformation and having a molecular weight of up to about 30 million daltons.

4. (Previously presented) The biocompatible poly-β-1→4-N-acetylglucosamine of claim 3 having up to about 15,000 N-acetylglucosamine monosaccharides covalently attached in a β-1→4 conformation, and having a molecular weight of up to about 3 million daltons.

5. (Canceled)

6. (Previously presented) The biocompatible poly-β-1→4-N-acetylglucosamine of claim 3 or 4 which has an elution test score of 0.

7. (Currently amended) The biocompatible poly-β-1→4-N-acetylglucosamine of claim 3 or 4 which has an elution test score of 1.

8. (Currently amended) The biocompatible poly-β-1→4-N-acetylglucosamine of claim 3 or 4 which has an elution test score of 2.

9-11. (Canceled)

12. (Previously presented) A biocompatible poly-β-1→4-N-acetylglucosamine comprising up to about 150,000 N-acetylglucosamine monosaccharides covalently attached in a β-1→4 conformation and having a molecular weight of up to about 30 million daltons in which at least one N-acetylglucosamine monosaccharide has been deacetylated.

13. (Previously presented) The biocompatible poly-β-1→4-N-acetylglucosamine of claim 12 having up to about 15,000 N-acetylglucosamine monosaccharides covalently attached in a β-1→4 conformation, and having a molecular weight of up to about 3 million daltons in which at least one N-acetylglucosamine monosaccharide has been deacetylated.

14. (Previously presented) The biocompatible poly-β-1→4-N-acetylglucosamine of claim 12 wherein at least about 25% to about 75% of the N-acetylglucosamine monosaccharides have been deacetylated.

15. (Previously presented) The biocompatible poly-β-1→4-N-acetylglucosamine of claim 13 wherein at least about 25% to about 75% of the N-acetylglucosamine monosaccharides have been deacetylated.

16. (Previously presented) The biocompatible poly-β-1→4-N-acetylglucosamine derivative of claim 12 wherein at least about 70% of the N-acetylglucosamine monosaccharides have been deacetylated.

17. (Previously presented) The biocompatible poly-β-1→4-N-acetylglucosamine derivative of claim 13 wherein at least about 70% of the N-acetylglucosamine monosaccharides have been deacetylated.

18. (Canceled)

19. (Previously presented) The biocompatible poly-β-1→4-N-acetylglucosamine of any one of claims 12-17 which has an elution test score of 0.

20. (Previously presented) The biocompatible poly-β-1→4-N-acetylglucosamine of any one of claims 12-17 which has an elution test score of 1.

21. (Previously presented) The biocompatible poly-β-1→4-N-acetylglucosamine of any one of claims 12-17 which has an elution test score of 2.

22-25. (Canceled)

26. (Previously presented) A biocompatible poly-β-1→4-glucosamine comprising up to about 150,000 glucosamine monosaccharides covalently attached in a β-1→4 conformation, and having a molecular weight of up to about 24 million daltons.

27. (Previously presented) The biocompatible poly-β-1→4-glucosamine of claim 26 having up to about 15,000 glucosamine monosaccharides covalently attached in a β-1→4 conformation, and having a molecular weight of up to about 2.4 million daltons.

28. (Previously presented) A biocompatible poly-β-1→4-glucosamine comprising up to about 150,000 glucosamine monosaccharides covalently attached in a β-1→4 conformation, wherein at least one glucosamine monosaccharide has been acetylated.

29. (Previously presented) The biocompatible poly-β-1→4-glucosamine of claim 28 wherein at least about 25% to about 75% of the glucosamine monosaccharides have been acetylated.

30. (Previously presented) The biocompatible poly-β-1→4-glucosamine of claim 28 wherein at least about 30% of the glucosamine monosaccharides have been acetylated.

31. (Canceled)

32. (Previously presented) The biocompatible poly-β-1→4-glucosamine of any one of claims 26-30 which has an elution test score of 0.

33. (Previously presented) The biocompatible poly-β-1→4-glucosamine of any one of claims 26-30 which has an elution test score of 1.

34. (Previously presented) The biocompatible poly-β-1→4-glucosamine of any one of claims 26-30 which has an elution test score of 2.

35-59. (Canceled)